Applicant Initiated Interview Request Form					
Application No.: 10/529	Firs	First Named Applicant: Takeo Azuma			
Examiner: David Rashic				of Application:	Final OA issued
Tentative Participants: (1) Timothy D. MacIntyr	re (Reg. No. 42,824)	(2)	Phil Du		
(3) Examiner David Ras	shid	(4)			
Proposed Date of Interv	view: January 7, 200	9	Proposed Time: 10:00 a.m. AM/PM		
Type of Interview Requested:					
(1) Telephonic (2) Personal (3) Video Conference					
Exhibit To Be Shown or Demonstrated:  If yes, provide brief description:					
Issues To Be Discussed					
Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) § 101 Rej.	claim 1		_ 🗆		
(2) <u>§ 102/103 Rej.</u>	claim 1	Daugman	_ 🗆		
(3)					
(4)			_ 🗆		
Continuation Sheet Attached					
Brief Description of Argument to be Presented:					
See attached Proposed Amendments.					
An interview was conduction on the above-identified application on  NOTE: This form should be completed by applicant and submitted to the examiner in advance of the interview					
(see MPEP § 713.01). This application will not be delayed from issue because of applicant's failure to submit a written record of this					
interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.					
Applicant/Applicant's Representative Signature Examiner/SPE Signature					
Typed/Printed Name of Applicant or Representative					
Registration Nur	nber, if applicable				

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

## FOR DISCUSSION ONLY

## PROPOSED AMENDMENTS

Regarding the rejection under 35 USC § 101, please consider the following proposed amendments.

- A. "using . . . apparatus to perform the steps. . ."
- B. 1. (currently amended) A counterfeit eye discrimination method comprising the steps of:

receiving image data of an image <u>captured from a living eye or a</u> reproduction of a living eye<del>including an eye</del>; and

detecting presence or absence of roughness in the image by image processing to the image data;

wherein the <u>image\_eye</u> is judged to <u>be a counterfeit eye that is have been captured from a reproduction of a living eye when roughness is detected in the image;[[.]]</u>

performing an authentication operation in response to the judgment.

## Regarding the rejections under 35 USC § 102 & 103, please consider the following proposed amendments.

C. 1. (currently amended) A counterfeit eye discrimination method comprising the steps of:

receiving image data of a photocopy image including an eye; and detecting presence or absence of roughness in the image by image processing to the image data, wherein pixel values of the image intrinsically determines a statistical variance of the pixel values, wherein the statistical variance conclusively determines the roughness;

wherein the eye is judged to be a counterfeit eye that is a reproduction of a living eye when roughness is detected in the image.

- D. We further propose to define the term "roughness" as follows:
  - a) The roughness is on the surface of the image.
  - b) The roughness is caused by ink or toner on a printer output.
  - c) The roughness is of intensity data of the image.
- d) The roughness is caused by repetition of a specific intensity pattern on the image.
- E. In contrast, Daugman at best discloses a) generating an identification iris code vector for an iris image captured and b) then comparing the identification iris code vector with reference iris code vectors in a library to calculate Hamming

## FOR DISCUSSION ONLY

distances, which are allegedly analogous to the claimed roughness. <u>Daugman</u>, col. 3, Ins. 1-36. In other words, the Hamming distances are not <u>conclusively</u> determined by the data of the iris image captured; the Hamming distances also depend on the reference iris codes.

Further, the above method of Daugman is to determine the identity of an iris. The iris image is presumed to be captured from a living eye. Daugman uses a different method, which monitors the pupillary diameter over time, to determine if the image is captured from a living eye or a photograph of a living eye. Daugman, col. 6, lns. 38-61. This method takes more than one image, and thus does not determine a reproduction conclusively from the data of a single image.

F. Regarding "detecting presence or absence of roughness" in the claims, we stated in the previous response that the small-scale variation between the reference code and the present code in Daugman differs from roughness in the image. But the Examiner has presented no statement for this argument.